



## (1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

**PTB 03 ATEX 2146**



(4) Equipment: Inductive Proximity Sensor type IFRM..X..

(5) Manufacturer: Baumer Electric AG

(6) Address: Hummelstraße 17, 8501 Frauenfeld, Switzerland

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 03-22304.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014:1997 +A1 +A2      EN 50020:2002      EN 50284:1999**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 1 G    EEx ia IIC T6

Zertifizierungsstelle Explosionsschutz  
By order:

Braunschweig, November 04, 2003

(signature)                      L.S.

Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor

**2 pages, correct and complete as regards content.**  
By order:  
  
Dr.-Ing. Johannsmeyer Braunschweig, September 17, 2007  
Direktor und Professor

(13) **SCHEDULE**

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 2146**

(15) Description of equipment

The Inductive Proximity Sensors type IFRM..X.. serve for the detection of metal parts. The initiators are used under normal atmospheric conditions.

The dependence of the temperature class allocation to the ambient temperature corresponds to the following table.

Temperature Class	T6	T5
permissible ambient temperature range	-25 °C to +40 °C	-25 °C to +60 °C

Electrical data

Supply circuit

type of protection Intrinsic Safety EEx ia IIC;  
only for connection to a certified intrinsically safe circuit. Maximum values:

$U_i = 13,5 \text{ V}$   
 $I_i = 37 \text{ mA}$   
 $P_i = 125 \text{ mW}$   
 $C_i = 50 \text{ nF}$   
 $L_i = 0,2 \text{ mH}$

(16) Test report PTB Ex 03-22304

(17) Special conditions for safe use

none

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz

Braunschweig, November 03, 2003

By order:

(signature)

Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor

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## 1. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 2146

(Translation)

Equipment: Inductive Proximity Sensor type IFRM..X..

Marking:  II 1 G EEx ia IIC T6

Manufacturer: Baumer Electric AG

Address: Hummelstraße 17, 8501 Frauenfeld, Switzerland

### Description of supplements and modifications

The basis of the standard for the Inductive Proximity Sensor type IFRM..X.. has changed and is determined as follows.

Applied standards:

**EN 60079-0:2009**

**EN 60079-11:2012**

**EN 60079-26:2007**

Due to the new standard the marking changes to:

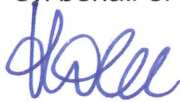
 II 1 G Ex ia IIC T6 Ga

The dependency of the assignment to the temperature class changes and corresponds to the standard ambient temperature range.

All other specifications apply without changes.

Test report: PTB Ex 12-22238

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

  
Dr.-Ing. T. Horn



Braunschweig, February 4, 2013

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